

IN THE CLAIMS

This listing of the claims replaces all prior listings of the claims for this application.

1. (original) An isolated sodium channel type III α subunit (mNa_v1.3 α subunit) polypeptide, wherein the polypeptide comprises the amino acid sequence of SEQ ID NO:2.
2. (amended) The polypeptide of claim 1, wherein the polypeptide ~~essentially~~ consists of the amino acid sequence of SEQ ID NO:2.
3. (original) An isolated mNa_v1.3 α subunit polypeptide comprising at least 10 contiguous amino acids of SEQ ID NO:2, wherein the polypeptide includes one or more of the following amino acids: isoleucine 289, proline 518, serine 728, serine 1355, asparagine 1909, threonine 1910, and valine 1921.
4. (original) An isolated mNa_v1.3 α subunit nucleic acid molecule that encodes the polypeptide of claim 1.
5. (original) The nucleic acid molecule of claim 4, wherein the nucleic acid comprises the nucleotide sequence of SEQ ID NO:1.
6. (amended) The nucleic acid molecule of claim 5, wherein the nucleic acid molecule consists ~~essentially~~ of the nucleotide sequence of SEQ ID NO:1.
7. (canceled)
8. (original) A fragment of the mNa_v1.3 α subunit nucleic acid molecule of claim 4, wherein the fragment encodes one or more of the following amino acids: isoleucine 289, proline 518, serine 728, serine 1355, asparagine 1909, threonine 1910, and valine 1921.
9. (original) An expression vector comprising the mNa_v1.3 α subunit nucleic acid molecule of claim 4 operably linked to a promoter.
10. (amended) An isolated A host cell comprising the nucleic acid of claim 4.
11. – 17. (cancelled)
18. (amended) A method for modulating a sodium current through a mNa_v1.3 channel ~~a subunit polypeptide activity in a cell~~, the method comprising: providing a sodium channel comprising a mNa_v1.3 α subunit polypeptide, wherein the mNa_v1.3 α subunit polypeptide is according to claim 1; and contacting the channel with a depolarizing voltage sufficient

~~to cause the channel to open and a sodium current to pass through the channel-an
amount of a mNa_v1.3 α subunit polypeptide modulator effective to modulate an activity
of the mNa_v1.3 α subunit polypeptide.~~

19. – 47. (cancelled)